

Clinical Presentation of Disorders of Extreme Stress in Combat Veterans

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Disorders of extreme stress (DES), previously referred to as disorders of extreme stress not otherwise specified and/or complex posttraumatic stress disorder, is a proposed diagnosis designed to describe the symptom presentation of those repeatedly exposed to traumatic stressors. Little is known, however, about the applicability of DES to combat veterans. We clinically assessed combat veterans for the presence or absence of DES in order to provide descriptive clinical information about the severity and patterns of endorsement of DES symptoms among combat veterans. Results indicate that DES is relevant to veterans and the implications of these results for both diagnoses and treatment are discussed.

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Disorders of extreme stress (DES), the symptom constellation previously referred to as complex posttraumatic stress disorder and/or disorders of extreme stress not otherwise specified (DESNOS), is a proposed diagnosis designed to describe a set of potential psychological effects of prolonged trauma that are not characterized by posttraumatic stress disorder (PTSD; Spitzer et al., 1989).^{2,3} For example, Herman (1992a, 1992b) argues that since the diagnostic criteria for PTSD are derived solely from the study of acute time-limited traumas (such as combat, disaster, and rape), the PTSD diagnostic category fails to identify survivors of prolonged severe trauma (such as sustained childhood sexual abuse, ongoing family violence, prisoner of war experiences, and prolonged torture conditions), who present with unique symptomatic and characterological problems. Thus, a new trauma-related disorder was proposed based on a set of symptoms that have been observed to be unique to those chronically exposed to trauma. Conceptually, DES was developed to redress gaps due to the artificial boundaries of the current DSM categorical taxonomy as well as account for the heterogeneity of symptoms among trauma survivors. The DES

includes symptom clusters pertaining to somatization, dissociation, alterations in the capacity for affect regulation, and alterations in systems of meaning (Herman, 1992a, 1992b).^{2,3} Currently in DSM-IV, the constellation of DES symptoms is described as a possible associated feature of PTSD, most commonly observed in those who experienced an "interpersonal stressor" such as being taken hostage, experiencing torture, or experiencing physical or sexual abuse during childhood (American Psychiatric Association, 1994).

Findings from the National Institute of Mental Health DSM-IV PTSD Field Trial Study suggest that DES is a subtype of PTSD that describes the symptomatic presentation of those chronically exposed to traumatic events.^{2,4} To date, DES has not been discussed conceptually nor explored empirically in the context of war zone trauma. While exposure to war zone experiences is commonly defined in acute terms, combat duty often involves great ongoing brutality and threat to life under conditions of deprivation and subjugation. In addition, life in a war zone is often colored by interpersonal conflict, betrayal, and profound loss, experiences that theoretically should increase risk for DES. Thus, in our view, many combat veterans may have experienced traumatic stressors, chronic and interpersonal in nature, that could potentially result in the type of identity and symptom changes captured by DES and not designated by PTSD. Further, it seems likely that the presence of DES may account, in part, for the severity and chronicity often associated with combat-related PTSD (Kulka et al., 1990).

In the current study, DES was assessed in a small

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² Pelcovitz D, van der Kolk BA, Roth S, Kaplan S, Mandel F, Resick P (1995) *Development and validation of the structured interview for measurement of Disorders of Extreme Stress*. Manuscript submitted for publication.

³ van der Kolk BA, Pelcovitz D, Roth S (1995) *Disorders of extreme stress: Results of the PTSD field trial for the DSM-IV*. Manuscript submitted for publication.

⁴ Roth S, Pelcovitz D, van der Kolk BA, Mandel FS (1995) *Complex PTSD in victims exposed to sexual and/or physical abuse: Results from the DSM-IV field trial for posttraumatic stress disorder*. Manuscript submitted for publication.

sample of service-seeking veterans with a history of war zone exposure. Preliminary descriptive clinical information about the applicability of DES among combat veterans is provided.

Methods

Participants

Participants were 10 male combat veterans who were seeking clinical services at the National Center for PTSD-Behavioral Sciences Division, Boston, Department of Veterans Affairs Medical Center. The average age of the veterans was 47.4 (SD = 9.91), and they had received on average 13.0 years of education (SD = 1.85). Eight participants were Caucasian and two were African-American. Most ($N = 8$) served during the Vietnam era, one veteran served in Beirut/Grenada, and one served in World War II. Five of the veterans were employed at the time of the study (one on a part-time basis). Four were married or co-habiting; the remainder were separated ($N = 2$), divorced ($N = 2$), widowed ($N = 1$), or never married ($N = 1$). All participants were exposed to at least moderate levels of combat as measured by the Combat Exposure Scale (Keane et al., 1989).

Measures

All participants completed a battery of questionnaires as part of their assessment that included the Mississippi Scale for Combat-Related PTSD (Keane et al., 1988). The Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990) was given to each veteran by specially trained doctoral-level clinicians. A multimethod diagnosis for PTSD was used (Malloy et al., 1983) in which veterans were classified as meeting PTSD diagnosis if they obtained both a positive diagnosis on the CAPS and a score of 107 or above on the Mississippi Scale.

Each veteran was also administered the DES Interview,⁵ a semistructured interview developed for the DSM-IV Field Trial that has sound psychometric properties.^{2,3} All interviewers were trained to administer the DES Interview and rate the veterans' current severity of symptoms in each DES category. The DES diagnosis was determined from criteria reported in the DSM-IV DESNOS final report.⁶ To facilitate consistent administration and scoring, written instructions for the interviewers were prepared that provided supplementary

standard interview probes and anchors for clinician ratings.⁷ The category "alterations in perception of the perpetrator" was not included in data analysis because this category is not necessary for a DES diagnosis^{3,6} and the wording of these questions was problematic for combat veterans. All interview data were reviewed in a research case conference and final scoring was derived by consensus.

Finally, since DES is likely to be found in chronically abused samples,⁴ each veteran was asked about any additional exposure to potentially traumatic events (e.g., complicated bereavement, natural disasters, sexual and physical abuse) using a nonstandardized clinical interview.

Results

Participant Characteristics

All participants met DSM-III-R criteria for current PTSD. The sample, although quite small, is demographically and psychometrically comparable to other treatment seeking veterans samples reported in the literature (e.g., Litz et al., 1992). Eight of the 10 veterans in our sample reported a history of childhood physical abuse ($N = 4$), sexual abuse ($N = 3$), or both ($N = 1$). This pattern of childhood exposure to potentially traumatic events is consistent with recent reports regarding the childhood histories of other treatment-seeking veterans (Bremner et al., 1993; Zaidi and Foy, 1994).

Frequency and Intensity of DES Symptoms

The DES symptoms were rated by severity (0 = no problem, 1 = reaction a little problematic, 2 = moderately problematic, and 3 = extremely problematic). Table 1 depicts the mean severity rating and number of veterans who endorsed each DES symptom. All 10 veterans also met the formal diagnostic criteria for current DES (see footnote 3 for detailed information about development, measurement, and scoring).

Finally, we generated a conservative criterion of symptom endorsement to examine the prevalence of clinically significant DES problem areas for the veterans interviewed. We rationally derived a decision rule in which a symptom was considered clinically significant if it was endorsed both at a mean severity of at least 1.5, and by at least 75% of the sample. Several DES subcategories met this criterion: affect modulation, anger modulation, amnesia, permanent damage, feeling no one understands, inability to trust, despair

⁵ van der Kolk BA, Pelcovitz D, Herman JL, Roth S, Kaplan S, Spitzer RL (1992) *The Structured Interview for Disorders of Extreme Stress*. Unpublished manuscript.

⁶ van der Kolk BA, Roth S, Pelcovitz D, Kaplan S, Mandell F, Resick P (1992) *Report of the findings of the DSM-IV PTSD Field Trial for the disorders of extreme stress-NOS (DESNOS) category*. Unpublished report.

⁷ Newman E, Vielhauer M, Orsillo S, Herman D, Niles B, Litz B (1993) *Complex PTSD manual: A manual designed to accompany the complex PTSD measure for studies conducted at the National Center for PTSD-Behavioral Sciences Division*. Unpublished manuscript.

TABLE 1
Percentage of Veterans Meeting Criteria and Mean Severity Rating for Each Symptom of Current DES^a

DES Symptoms	Symptoms endorsed (N)	Severity (Mean \pm SD)
I. Alterations: Affect and Impulses (A and one of B-F required)		
A. Affect regulation (2 required)		
(1) Easily upset	10	2.10 \pm .32
(2) Trouble letting go of feelings	9	2.00 \pm .82
(3) Trouble calming down	10	1.70 \pm .48
B. Anger modulation (2 required)		
(4) Angry feelings	10	2.10 \pm .88
(5) Images of hurting others	6	1.10 \pm .99
(6) Trouble controlling anger	9	1.60 \pm .70
(7) Constricted affect due to anger	6	1.10 \pm 1.29
C. Self-destructive		
(8) Accident prone	6	.90 \pm .88
(9) Careless about safety	4	.60 \pm .84
(10) Hurt/mutilate self	2	.20 \pm .42
D. (11) Suicidal preoccupation	4	.40 \pm .52
E. Sexual modulation		
(12) Effort to avoid sexual thoughts	1	.10 \pm .32
(13) Bothered by general touching	7	1.20 \pm .92
(14) Bothered by sexual touching	4	.70 \pm .95
(15) Avoids sex	6	.90 \pm .88
(16) Thinks about sex often	2	.20 \pm .42
(17) Compelled to sexual activity	2	.40 \pm .84
(18) Dangerous sexual activities	1	.10 \pm .32
F. (19) Risk taking	6	1.00 \pm 1.05
II. Alterations: Attention/Consciousness (A or B needed)		
A. (20) Amnesia	9	1.80 \pm .79
B. Dissociative episodes		
(21) Difficulty keeping track of time	8	1.60 \pm .67
(22) "Space out" under stress	4	.80 \pm 1.14
(23) Derealization	6	.80 \pm .79
(24) Depersonalization	3	.30 \pm .48
III. Alterations: Self-Perception (two of A-F)		
A. (25) Ineffectiveness	7	1.00 \pm .82
B. (26) Permanent damage	8	1.70 \pm 1.06
C. (27) Guilt/responsibility	6	1.30 \pm 1.25
D. (28) Shame	6	1.20 \pm 1.03
E. (29) No one understands	9	1.60 \pm .70
F. (30) Minimizing	2	.30 \pm .67
IV. Alterations in Perception of Perpetrator (questions 31-33 skipped)		
V. Alterations: Relations with Others (one of A-C)		
A. Inability to trust		
(34) Unable to trust	10	2.00 \pm .67
(35) Avoids relationships	10	2.00 \pm .47
(36) Difficulty negotiating	9	1.80 \pm .92
B. (37) Revictimization	2	.20 \pm .42
C. (38) Victimizing others	4	.60 \pm .84
VI. Somatization (two of A-E)		
A. Digestive system		
(39a) Vomiting	0	
(39b) Abdominal pain	3	.40 \pm .70
(39c) Nausea	2	.30 \pm .67
(39d) Diarrhea	1	.30 \pm .48
(39e) Food intolerance	2	.20 \pm .42
B. Chronic pain		
(40a) Arms/legs	2	.30 \pm .67
(40b) Back	3	.30 \pm .48
(40c) Joints	2	.30 \pm .67
(40d) Urination	0	
(40e) Other	1	.10 \pm .32

TABLE 1
Continued

DES Symptoms	Symptoms endorsed (N)	Severity (Mean \pm SD)
C. Cardiopulmonary		
(41a) Shortness of breath	6	.80 \pm .79
(41b) Palpitations	6	.90 \pm .88
(41c) Chest pain	6	.90 \pm .88
(41d) Dizziness	6	1.00 \pm .94
D. Conversion symptoms		
(42a) Swallowing	3	.50 \pm .85
(42b) Losing your voice	1	.20 \pm .63
(42c) Blurred vision	3	.40 \pm .70
(42d) Actual blindness	0	
(42e) Fainting and losing consciousness	1	.20 \pm .63
(42f) Seizures and convulsions	1	.10 \pm .32
(42g) Unable to walk	0	
(42h) Paralysis or muscle weakness	1	.10 \pm .32
(42i) Urination	0	
(42j) Headaches	4	.60 \pm .84
E. Sexual symptoms		
(43a) Burning in sexual organs/rectum	1	.20 \pm .63
(43b) Impotence	1	.20 \pm .63
VII. Alterations: Systems of Meaning (one of A-B)		
A. Despair/hopelessness		
(44) Hopeless about future	8	1.60 \pm 1.07
(45) Hopeless about love	5	.90 \pm .99
(46) Hopeless about satisfying work	5	1.30 \pm 1.42
B. Loss of previously sustaining beliefs		
(47) Life lost meaning	8	1.80 \pm 1.03
(48) Change in ethics/religion	5	.80 \pm 1.03

^a Roman numerals represent categories. Subcategories are alphabetically demarcated. Items are numbered. Some subcategories are assessed with only one symptom question. These are denoted both with a letter and number.

and hopelessness, and loss of sustaining beliefs. Numerous individual items were also endorsed at this criterion level.

Discussion

All veterans in our clinical sample technically met criteria for the DES symptom constellation; yet only a few symptoms were endorsed by a significant proportion of participants at a moderate severity level. The DES categories that are most applicable to these combat veterans are: problems with affect regulation, amnesia for important life events, feelings as if one is permanently damaged, feeling as if no one understands, feeling unable to trust, despair, and feeling a loss in life's meaning. These problem areas are not covered under the PTSD diagnosis. While ultimately DES may not be the most parsimonious diagnostic label, asking about DES symptoms in the assessment of traumatized veterans may be useful for devising and implementing treatment plans. In our clinical experience, collecting information about the constellation of DES symptoms, particularly the interpersonal and affect regulation items, had several clinical benefits. It allowed the interviewer: a) to have greater empathy and understanding

of the client; b) to gain some distance from client's potentially difficult and noncompliant behaviors; c) to anticipate impediments to building and maintaining a positive working alliance; and d) to identify additional, non-PTSD-related targets for intervention.

Although the veterans in our preliminary study endorsed numerous DES symptoms, the mean severity of their impairment was at a relatively low level. Currently, the criteria for DES do not require marked distress or marked impairment in functioning, but rather overall endorsement of a pattern of specific symptomatology at minimal levels of distress or impairment. Because the DES criteria do not require elevated severity for each symptom, the DES is likely to be extremely sensitive but not very specific and may result in overinclusiveness. However, the increased sensitivity of the DES may be important in screening contexts where clinicians may be likely to overlook a DES symptom because its severity may seem insufficient to warrant attention. It may be the case that, in aggregate, the collection of mildly severe DES symptoms experienced create a great functional disturbance.

In the application of the DES interview to combat veterans, several problems were noted that may have

affected our results. For instance, some questions were not applicable to war zone trauma (e.g., idealization of perpetrators), and some of the questions were not written to effectively gather data from men (e.g., those about modulating sexual activity). Further, it may be difficult to rule out physical causes for symptoms in the somatization section with a veteran population. Many combat veterans present with a multitude of health problems related to exposure to potential toxins, head injury, disability, and increased health risk behaviors (such as smoking, substance use, and poor diet).

Unfortunately, the question of whether or not combat trauma alone can result in the development of DES symptoms remains unanswered by these data. In addition to a history of combat exposure, 8 of the 10 veterans in our sample reported some history of childhood physical or sexual abuse, or both. Given the high base rate of childhood abuse in some samples of treatment-seeking veterans (Bremner et al., 1993; Zaidi and Foy, 1994), it may be likely that childhood trauma, rather than war zone trauma, is a particularly influential predisposing factor for DES.⁴

In conclusion, our preliminary clinical results suggest that although DES is clinically relevant, its diagnostic utility is uncertain. Although caution must be taken in generalizing from this small sample, the preliminary results suggest important new directions in the research and instrument development. Further research is needed to provide more definitive information about the relationship between DES and combat exposure. Future studies will need to evaluate whether exposure to a war zone alone could increase risk for DES, or whether DES is mostly accounted for by early abuse histories in combat veterans. Since some veterans may have experienced early trauma, research on DES and

veterans will need to include a systematic assessment of exposure to all possible traumatic life events. In addition, it will be important to assess comorbid axis I and axis II disorders and DES in a larger sample to systematically evaluate the discriminant validity of DES. The inclusion of non-treatment-seeking individuals with PTSD in such a sample might further clarify the validity and limits of the DES construct. Finally, our work suggests some potential changes in the interview itself that may improve its applicability across traumas.

References

- American Psychiatric Association (1994) *Diagnostic and statistical manual of mental disorders (4th ed)*. Washington DC: American Psychiatric Association.
- Blake DD, Weathers FW, Nagy LN, Kaloupek DG, Klauminser G, Charney DS, Keane TM (1990) A clinician rating scale for assessing current and lifetime PTSD: The CAPS-1. *Behav Ther* 18:187-188.
- Bremner JD, Southwick SM, Johnson DR, Yehuda R, Charney DS (1992) Childhood physical abuse and combat-related posttraumatic stress disorder in Vietnam veterans. *Am J Psychiatry* 150:235-239.
- Herman JL (1992a) *Trauma and recovery*. NY: Basic Books.
- Herman J (1992b) Complex PTSD: A syndrome in survivors of prolonged and repeated trauma. *J Traum Stress* 5:377-391.
- Keane TM, Caddell JM, Taylor KL (1988) Mississippi Scale for Combat-Related Posttraumatic Stress Disorder: Three studies in reliability and validity. *J Consult Clin Psychol* 56:85-90.
- Keane TM, Fairbank JA, Caddell JM, Zimering RT, Taylor KL, Mora CA (1989) Clinical evaluation of a measure to assess combat exposure. *Psychol Assess J Consult Clin Psychol* 1:53-55.
- Kulka RA, Schlenger WE, Fairbank JA, Jordan BK, Hough RL, Marmar CR, Weiss DS (1990) *Trauma and the Vietnam war generation: Report of findings from the National Vietnam Veterans Readjustment Study*. NY: Brunner/Mazel.
- Litz BT, Keane TM, Fisher L, Marx B, Monaco V (1992) Physical health complaints in combat-related posttraumatic stress disorder: A preliminary report. *J Traum Stress* 5:131-141.
- Malloy PF, Fairbank JA, Keane TM (1983) Validation of a multimethod assessment of posttraumatic stress disorders in Vietnam veterans. *J Consult Clin Psychol* 51:448-494.
- Spitzer R, Kaplan S, Pelcovitz D (1989) *Victimization disorder*. New York: New York Psychiatric Institute.
- Zaidi LY, Foy DW (1994) Childhood abuse experiences and combat-related PTSD. *J Traum Stress* 7:33-42.